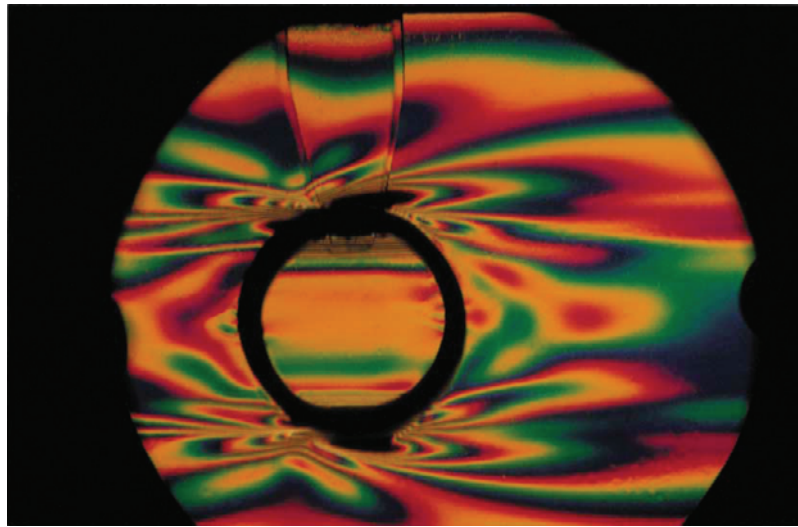


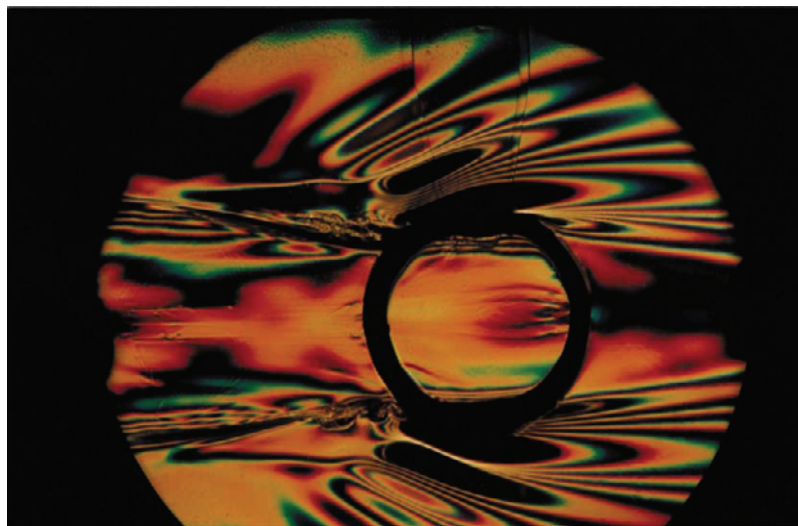
5. “Natural Rainbow” Schlieren Image of Stratified Flow around Horizontally Towing Cylinder

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5.1 Pattern of flow around starting cylinder in a continuous stratified salt brine. Buoyancy period $T = 6.1$ s, body diameter is 7.6 cm, towing velocity is 0.06 cm/s, $Re = 48$, $Fr = 0.01$ $t = 12$ s (motion from left to right). Complex structure of a vertical component of density gradient is observed ahead of the body, where blocked fluid and transient internal waves are formed, and past the body, inside downstream wake separated from adjoin (lee) internal waves by thin high gradient interfaces.



5.2 Pattern of flow past horizontal cylinder (buoyancy period $T = 6.1$ s, body diameter is 7.6 cm, towing velocity is 0.24 cm/s, $Re = 182$, $Fr = 0.03$ (motion from left to right). There is “trauma” of stratification: horizontal interfaces inside adjoins internal waves past the cylinder do not contact with the body or with a vortex.